

REMARKS

Claims 1-15 are currently pending in this application. Claim 3 has been amended. Claim 15 has been canceled. Support for the language “water” can be found on page 13, lines 13-15. No new matter has been added. In view of these amendments and of the following remarks, Applicants believe that all the asserted rejections are in condition for withdrawal and all the claims are in condition for allowance.

Claims 3-6 stand rejected under 35 U.S.C. 112, first paragraph, for purported lack of written description. The Examiner asserts that upon further review of the specification, “at least one customary carrier” inserts new matter into the specification. Claim 3 has been amended to delete the phrase “at least one customary carrier,” thus mooting this rejection. Because claims 4-6 depend directly from claim 3, their rejection also is moot.

Claim 15 stands rejected under 35 U.S.C. 112, second paragraph, for purported indefiniteness. Claim 15 has been canceled, thus this rejection is moot.

Claims 3-6 stand rejected under 35 U.S.C. 102(a), (b) and (e) for purported anticipation by Kisfaludy et al. The Examiner asserts that water is a customary carrier for agrochemical compositions and that Kisfaludy et al. specifically teach the synthesis of tertiary-butyloxycarbonyl aminoxyacetic acid (t-Boc-AOA) in col. 6, “Step 1,” lines 5-26, “wherein the subject compound is crystallized out of an aqueous solution.”

Contrary to the Examiner’s assertion, Applicants note that the t-Boc-AOA, recited in col. 6, “Step 1,” lines 16-19, “is cooled and stirred for 2 hours, then the separated crystals are filtered off, the crude product, weighing 419 g., is crystallized from

a mixture of chloroform and n-hexane,” both of which are organic, rather than aqueous, solvents. Furthermore, in “Step 2,” the t-Boc-AOA compound is dissolved in dimethyl formamide, another organic solvent. Thus, the t-Boc-AOA taught by Kisfaludy et al. is a non-aqueous compound.

Applicants now have amended claim 3 to recite that the claimed plant growth regulator compounds contain water. Support for the aqueous nature of the claimed compounds is found in Example 7, which describes the synthesis of the t-Boc-AOA compound of the present invention. In particular, the specification states, in pertinent part, “The ether phase is washed with H<sub>2</sub>O (2 x 30 ml) and dried on Na<sub>2</sub>SO<sub>4</sub>. Evaporation of the ether gave t-Boc-AOA...” (emphasis added). Thus, upon ether evaporation, the t-Boc-AOA compound contains only water. Therefore, the Kisfaludy et al. non-aqueous intermediate product can no longer anticipate the aqueous claimed compounds of the present invention.

Finally, those skilled in the art would not be motivated to practice the claimed invention based on the intermediate non-aqueous t-Boc-AOA compound disclosed by Kisfaludy et al.

According to *In re Lalu*, 747 F.2d 703, 223 U.S.P.Q. 1257 (Fed. Cir. 1984), if prior art merely discloses compounds as intermediates in the production of a final product, one of ordinary skill in the art would not be motivated to stop the reference synthesis and investigate the intermediate compounds with an expectation of arriving at claimed compounds which have different uses. *MPEP*, 2144.09.

In *In re Lalu*, the invention was directed to perfluoroalkyl sulfonyl chlorides and bromide compounds useful in the textile, leather and paper industries as corrosion-inhibiting agents, surface active agents and leveling agents, and having the formula:  $C_nF_{2n} + _1(CH_2)_bSO_2Z$ . The only independent claim on appeal was a product claim reciting the formula of the perfluoroalkyl sulfonyl compounds. The sole reference relied upon by the Board of Patent Appeals and Interferences (BPAI) was U.S. Patent No. 3,130,221 to Oesterling, directed to 1,1-dihydroperfluoroalkyl sulfonic acids useful as high energy fuels such as liquid rocket propellants because of their relatively high thermal stability, having the formula:  $C_nF_{2n} + _1CH_2SO_3H$ . The intermediate sulfonyl chlorides used to prepare the final product sulfonic acids had the formula:  $C_nF_{2n} + _1CH_2SO_2Cl$ . The Examiner rejected the claims based on structural obviousness because Oesterling taught homologous compounds. The Federal Circuit stated:

There is no disclosure that the Oesterling compounds would have any properties in common with those of appellants' compounds, as those properties of the former relate to the use of the compounds for base neutralization, catalysis, metal cleaning, and fuel. **The mere fact that Oesterling's sulfonyl chlorides can be used as intermediates in the production of the corresponding sulfonic acids does not provide adequate motivation for one of ordinary skill in the art to stop the Oesterling synthesis and investigate the intermediate sulfonyl chlorides with an expectation of arriving at appellant's claimed sulfonyl halides for use as corrosion inhibiting agents, surface active agents, or leveling agents.** (emphasis added).

*Id* at 707.

Therefore, Applicants assert that the Kisfaludy et al. non-aqueous t-Boc-AOA compound disclosed as an intermediate product for the synthesis of modified ACTH peptides having enhanced ACTH activity does not provide adequate motivation for one

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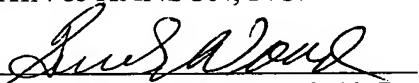
of ordinary skill in the art to stop the Kisfaludy et al. synthesis and investigate the non-aqueous t-Boc-AOA compound with an expectation of arriving at Applicants' claimed aqueous t-Boc-AOA compounds which increase the concentration of active plant growth regulators in plants.

For all the foregoing reasons, claims 1-14 are patentable over the cited prior art and in condition for allowance. Reconsideration of the rejections and allowance of pending claims 1-14 are respectfully requested.

Respectfully submitted,

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